

REMARKS

Claims 31-34 have been added. No new matter was added. Thus, claims 1, 2 and 13-34 are pending. Applicant respectfully submits that the claims, as amended, are in compliance with 35 USC §112, first and second paragraphs. Accordingly, Applicant respectfully submits that the present application is in condition for allowance.

I. Claim Rejections - 35 USC §112, second paragraph

In the Office Action, claims 1, 2 and 13-30 are rejected under 35 USC §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention.

The term “black treatment” has been deleted from claims 1 and 2.

Claim 2 has been amended to distinctly require the surface of the blackened layer on the copper foil to have the claimed glossiness parameter. No new matter was added; for instance, see pages 17 and 18 of the present application, as filed, with respect to the glossiness of the black plated copper foil.

Claims 13-17 and 22-26, as filed, are directed to specifics with respect to the blackened layer formed on the copper foil.

As best stated in the present application, as filed, on page 12, line 25, to page 13, line 3, the blackened layer formed on the copper foil is: (i) a “black plated layer”; or (ii) a “black plated layer” further coated with a “coat plated layer”. The “black plated layer” is a Co, Cu-Co, Cu-Ni, or Cu-Ni-Co plated layer, and the “coat plated layer” is a Ni or Ni-Co plated layer. See the present application at page 11, line 9, to page 13, line 3, and see page 16, Table 1, which includes a column identifying the “Plating Solution” and the “Coat Plating Solution”. Also see page 18,

Table 2, which provides the Ni and Co mass of deposit per unit area content (mg/m^2) of the blackened layer on the copper foil.

Accordingly, claims 13 and 22 have been amended to distinctly require the “blackened layer” to be an electro-plated coating of at least one of Co, Ni-Cu, Co-Cu and Ni-Co-Cu.

Claims 14-17 and 23-26 have been amended to require the blackened layer to specifically include one of the above referenced “black plated layers” and to require a specific range of Ni or Co content in the layer. For instance, see Examples 1-3, 7-13 and 17-20 in Tables 1 and 2 of the present application, as filed.

New claims 31-34 require a blackened layer to specifically include one of the above referenced “black plated layers” coated with one of the above referenced “coat plating layers” and require a specific range of Ni and Co content in the blackened layer. For instance, see Examples 4-6, 14-16 and 21-28 in Tables 1 and 2 of the present application, as filed.

Finally, claims 18 and 27 are amended to require the “thickness” of the copper foil to be in the claimed range. No new matter was added. See the present application on page 14, lines 22-23, and Table 1 on page 16 which identifies “Foil Thickness (μm)”.

In view of the above referenced amendments, Applicant respectfully submits that claims 1, 2 and 13-34 are in full compliance with 35 USC §112, second paragraph. Accordingly, Applicant respectfully requests reconsideration and removal of the above referenced rejection.

II. Claim Rejections - 35 USC §112, first paragraph

In the Office Action, claims 1, 2 and 13-30 are rejected under 35 USC §112, first paragraph, as not being enabled by the specification.

In the Office Action, the Examiner states that the specification of the present application provides a proper enabling disclosure relative to a copper foil provided with a layer having a blackened surface. However, the Examiner states that the specification “does not reasonably provide enablement for copper foil whose surface is blackened without providing a separate layer having a black surface.”

All the claims of the present application have been amended to refer to a copper foil having a “blackened layer” formed on one or both sides of the copper foil.

In view of the above referenced amendment, Applicant respectfully submits that claims 1, 2 and 13-34 are in full compliance with 35 USC §112, first paragraph. Accordingly, Applicant respectfully requests reconsideration and removal of the above referenced rejection.

III. Conclusion

In view of the above amendments and remarks, Applicant respectfully submits that the rejections stated in the Office Action have been overcome. A favorable action on the merits is therefore requested.

Please charge any deficiency or credit any overpayment for entering this Amendment to our deposit account no. 08-3040.

Respectfully submitted,
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